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COOPERATION WITHIN STRATEGIC ALLIANCES IN THE DISTRIBUTION

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1.1. Introduction

The distribution of consumer goods can be characterized as a cycles of activities, performed by a number of organizations with the purpose of making a product or service available for use or consumption. The purpose of the participating organizations in the distribution channel can be characterised as *satisfying demand* by supplying goods or services at the right place, quantity, quality and price, as well as by *stimulating demand* through marketing activities of the participants within the distribution channel (e.g., retailers, wholesalers, sales offices, manufacturers' representatives) (Stern, El-Ansary & Brown, 1989).
A distribution channel can be organised in different ways. One can make a distinction between a one-level channel (e.g. direct marketing) and multi-level channels as shown in figure 1.

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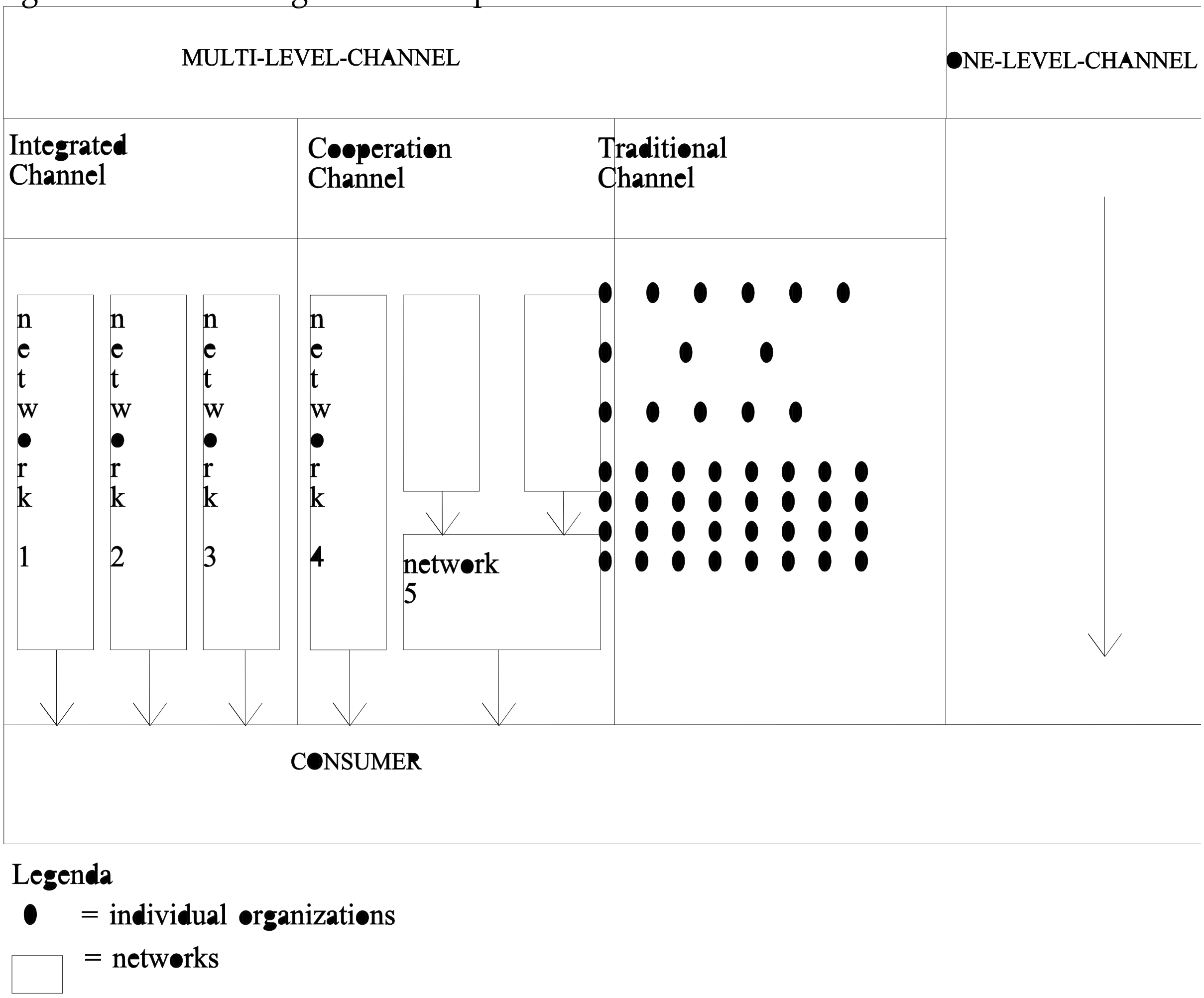
Figure 1: Different organizational patterns within the distribution channel



Within the multi-level channels there is a distinction between three different types of distribution channels. First the traditional distribution channel where the organizations involved with the distribution process are fully independent. Secondly the cooperation channel in which the participating organizations are cooperating with each other (strategic alliances) in order to achieve an optimal individual and distribution channel performance. Thirdly the integrated channel in which all activities within the distribution channel are performed by one, integrated organization.

This study focusses on the strategic alliances of small and medium sized enterprises (e.g. retailers and retail cooperations) within the cooperation channel. We are especially interested in the relationship between the degree of cooperation and the performance of the cooperating firms.

We will therefore discuss the changes in the distribution channel, and its effects on the distribution functions and distribution performance. In the empirical study, within the distribution of mens wear in the Netherlands, we will focus on the differences between strategic alliances within the cooperation channel and how these differences affect their performances.

1.2. Distribution Dynamics

The growing importance of the integrated and the cooperation channel within the distribution system of consumer goods and services is evident. In table 1 we can see the growing importance of both distribution channels in The Netherlands.

Table 1: Market shares of the different distribution systems in the Dutch retail trade

distribution systems	market share (%)			
	1980	1985	1990	1992
- traditional channel	44	31	24	20
- cooperation channel	29	35	40	43
- integrated channel	27	34	36	37
Total	100	100	100	100

Source: Center for Retail Research The Netherlands (CRR) and Tilburg University (1993)

The dramatic change shown in table 1, is mainly due to changes in the purchasing and shopping habits of the consumer. The discretionary income and the mobility of the consumer have grown rapidly in the last decennia. As a result of the growing spending power, the consumer becomes more critical on the performance of the retailers. They ask for wider and deeper assortments, more shopping convenience (one-stop and one-shop shopping) and a much higher service performance. Only the most powerful organizations, which are financial strong enough and have enough professional marketing skills, are able to coop with these problems. As a result, competition becomes more fierce and can be characterized nowadays as a competition between several distribution systems (integrated or cooperative) in stead of a competition between the individual distribution organizations. For example the drugs distribution in The Netherlands is dominated by four cooperative (in total 1.362 retail outlets) and five integrated (in total 1.301 retail outlets) distribution systems. The 302 fully independent druggists in the traditional distribution channel have a very small market share (source CRR, 1993). Strategic alliances are competing against each other and against the large fully integrated enterprises with different store formula's. Kotler (1991) concludes that the new competition in retailing is no longer between independent business units but between whole systems of centrally programmed networks competing each other to achieve the best cost economies and consumer response.

1.3. Distribution Functions

Our interest concerns the degree of cooperation within the strategic alliance in relation to the performance of the participants within that alliance. In a distribution system the activities concern the distribution functions that have to be performed in order to achieve demand-satisfaction and demand-stimulation.
According to Clark (Meulenberg, 1989) the distribution functions can be classified in three main categories:

A. The ~~exchange functions~~ (i.e matching demand and supply), that has two subfunctions, namely:
   - Buying: all demand satisfying activities concerning the width and depth of the assortment as well as the actual buying of the individual articles;
   - Marketing and selling: all demand stimulating activities;

B. The ~~physical distribution functions~~. These activities, mainly transport and storage, are performed in order to get the right product available for consumption at the right moment, place, and quantity;
C. The ~~supporting functions~~ for function -A- and -B-, such as finance, market research etcetera.

Clark regards matching demand and supply as well as the physical distribution of goods as two separate yet closely related parts in the distribution of consumer goods. The exchange function comprises the demand-stimulating and demand-satisfying tasks in the distribution chain. The logistic function comprises the propulsion of physical goods-flow in the distribution channel and - from this point of view - supports the exchange function.
The enterprises in the integrated channel and the strategic alliances in the cooperation channel express the exchange function into a commercial policy, the store formula. The store formula provides the distinctive quality with regard to rival strategic alliances and/or enterprises. The store formula consists of a number of policy variables which constitute the retailing-mix. Six types of policy variables are distinguished (Stern & El Ansary, 1991):

-1- product range policy; involving policy decisions relating to the width and depth of the product range; defining the composition of the core product range and the marginal product range, the brands and the packaging;
-2- store location policy; particularly involving decisions in terms of number of outlets, their location and size;
-3- display policy; involving decisions in terms of store exterior and store interior, sales system, store layout, display of goods, routing etc.;
-4- human resource policy; mainly relating to decisions in terms of quality and quantity of work force;
-5- communication policy; relating to the composition of the communication mix, target definition and allocation of budget to various communication-mix instruments, and the utilization of media;
-6- pricing policy; involving decisions on the general price level, margins, price-setting methods and pricing policy in respect of competitors.

The success of a strategic alliance in the distribution depends on the way the shopping formula is formulated and executed. In our study we focus on the six distribution functions concerning the store formula described above, as they express the differences between various strategic alliances in the distribution channel.

1.4. The degree of cooperation within the strategic alliances

Strategic alliances of small or medium sized enterprises in the cooperation channel can be differentiated in two main forms (Pleijster, Gianotten and Zwaard, 1986):
- horizontal cooperation: involving cooperation between organizations from the same link in the distribution chain and, therefore, cooperation based on homogeneity;
- vertical cooperation; involving cooperation between organizations from different, consecutive links in the distribution chain and, therefore, cooperation based on complementarily.

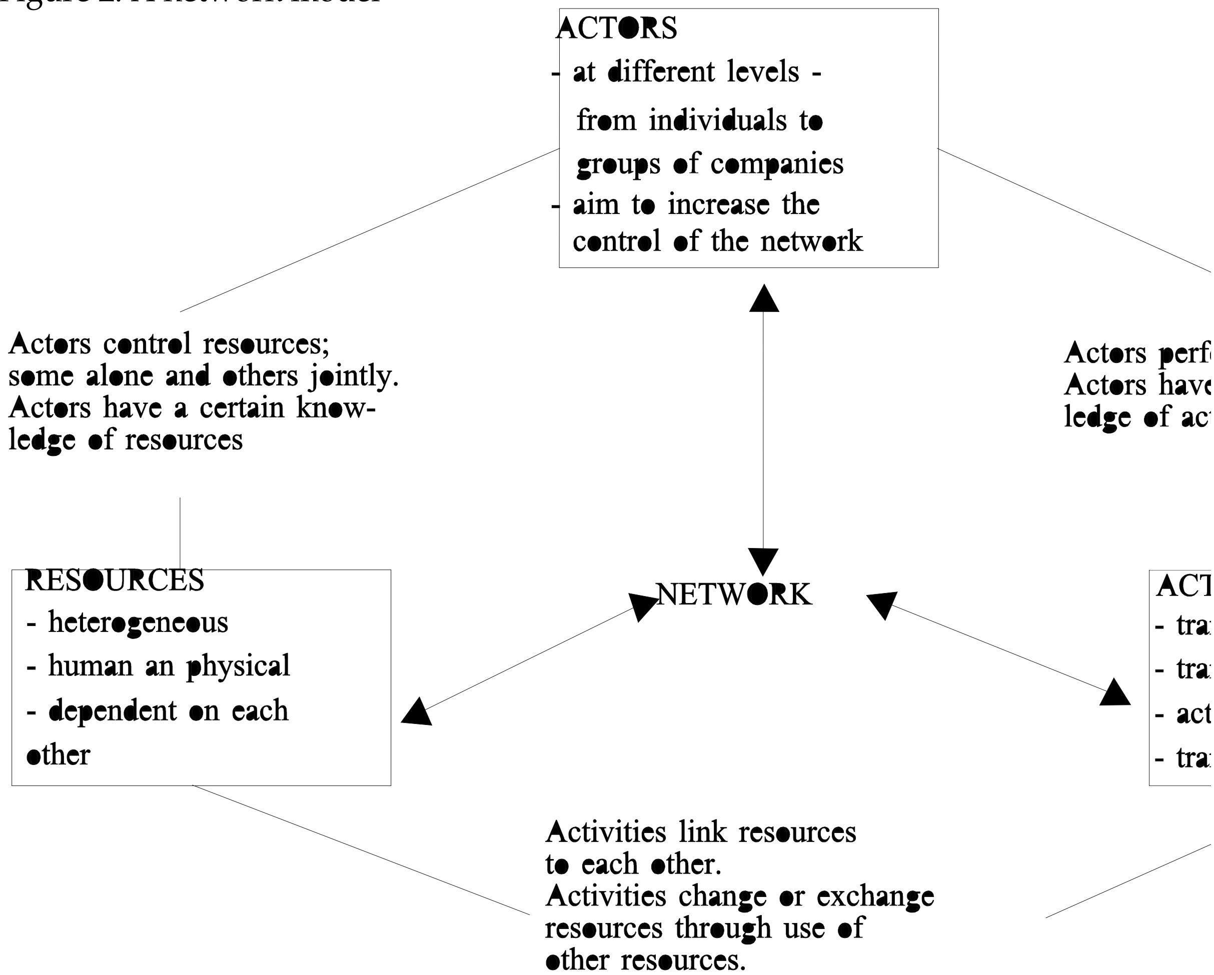
Strategic alliances can be seen as networks of organizations. We are interested in *distribution networks*. Distribution networks are characterized by a certain cooperation and decision making structure aimed at the realization of a certain market position. According to Håkansson (1987), a network contains three basic elements (figure 2):

a. *Actors*, defined as those who perform activities and/or control resources within a certain field. Actors can be individuals, a group of persons, a division within a company, a company, or a group of companies.

b. *Activities,* that are performed by actors. There are two categories of activities: transformation activities and transaction activities. Transformation activities are carried out within the control of one actor and are characterized by one resource being improved by the use of other resources. Transaction activities link transformation activities and create relationships with other actors. They serve the exchange function.

c. *Resources*, which consists of physical assets (machinery, materials, shops, warehouses etcetera), financial assets and human assets (labor, knowledge and relationships).

Figure 2: A network model



Source: Håkansson (1987, p. 17)

The network model supposes certain mutual relationships between actors within the network. These relationships have two dimensions, namely a social and an economic dimension (Melin (1987), Scott (1985) and Boekema & Kamann (1989)). The social dimension refers to the human relationships within the network, the economic dimension refers to the transaction relationships. Our study concerns the economic relationships.

Formally the network theory contains elements of the market theory and of the organization theory. The degree of cooperation determines whether market theoretical aspects or organizational theoretical aspects are dominating. Based on the degree of cooperation one can make a distinction between three models for network-management structures (Szarka, 1989 p.13, Harrigan, 1983, p.7):

1. The ~~supremacy model~~. This model is based upon a (quasi) hierarchically structured relationship pattern and permits one participant to dominate (an)other participant(s);
2. The ~~coordination model~~. This model emphasizes the coordination of activities

between the various participants. Here, the network leader is in charge of coordination, which is generally based on contracts. The participants in this model are known as coordinating firms and coordinated firms. This explains the significant asymmetry between network leader (defined as the hub firm by Jarillo, 1988, p. 34) and other participants. The utilization of coordinated participants is primarily based on their expertise in a specific domain that might often be essential for the entire network performance. In this model, relationships are interdependent and lead to an equilibrium of power between the parties involved;

3. The cooperation model. This model illustrates bilateral or multilateral cooperation between more or less equal firms. Here, cooperation is based on interdependence and mutual trust.

Key variables in these network-management models are:
- the degree of autonomy of the participants;
- their power positions; and
- the manner in which coordination is implemented.

These factors are inextricably interrelated: with an increasing degree of a distributor's power the degree of autonomy in terms of strategy, tactics and operations increases and so will the ability to implement coordination on an operational level.
Differences between alternative distribution networks manifests themselves in a number of cooperation characteristics, which may relate to (Varadarajan and Rajaratnam, 1986):

- the intensity of cooperation in a distribution network; e.g. intensive cooperation or less intensive cooperation (respectively defined as 'close working relationship' and 'arms-length relationship' by Varadarajan);
- the level of cooperation. A distinction can be made between the organizational level and the functional level. On the organizational level several organizational functions are involved. On the functional level cooperation agreements may include a single (organizational) function, such as cooperation in R & D, market research, marketing, reciprocal promotional support etc.;
- the focus of cooperation in a distribution network. Cooperation may include a specific product or service, whereas in other situations cooperation may include the collective marketing of goods or services. In terms of marketing, cooperating firms may decide to implement a collective, integrated marketing strategy (shop formula), relating to all relevant retail-mix variables, or firms may decide to restrict their cooperation to a specific marketing program for example a collective promotion campaign.
- the actual realization of cooperation in the functional distribution level of a distribution network, as expressed in concrete and observable behavior.

Organizations can be classified in terms of the power structure within the network. Cooperation between the organizations within a distribution network may vary in terms of intensity of cooperation, the level, focus and realization of the cooperation. In figure 3 the cooperation characteristics are given of the three different models of network management structures.

Figure 3: Network management structures and their cooperation characteristics

	models of network management structures		
cooperation characteristics	supremacy	coordination	cooperation
- intensity of cooperation	intensive	<--------->	extensive
- level of cooperation	organizational	<--------->	functional
- focus of cooperation	multilateral	<--------->	unilateral
- actual realization	collective marketing strategy	<--------->	cooperation regarding specific marketing functions

By realization of these characteristics the network structure is actually implemented. For example, a hard-franchise agreement in a distribution network may, according to the supremacy model, be described as a long-term agreement to cooperate intensively on a whole range of activities such as product range, store location, displays, communication and price, by means of a collective, integrated marketing strategy on the organizational level. A Cooperation model, as the other extreme, may encompass only an ad hoc joint promotion campaign.

1.5. Reasons for cooperation within strategic alliances

Within a distribution channel there are certain advantages related to cooperation within strategic alliances (Arndt (1979), Porter & Fuller (1986), Duijnhouwer (1992), Van de Klugt (1989), Den Hartog & Commandeur (1990) and Yanagida (1992)):

- Market control on the buying market in order to assure the organization of the supply of important goods. Horizontal cooperation between similar organizations is most often done to become powerful on the buying market;
- Market control on the selling market: cooperation within a strategic alliance creates a more powerful position on the selling market (customer market). This enables the strategic alliance to realize a strategic market position on the basis of advantages of scale;
- Reduction of costs and risks: reduction of costs and risks resulting from the combination of supplementary activities within a strategic alliance may encompass; e.g. logistics, marketing, market research, and product development;
- The access to knowledge, skills and resources; the realization of a strong competitive market position without having substantial knowledge, (marketing) skills and (marketing) resources is almost an utopia for the small and medium sized enterprise in the distribution. The critical mass that is needed herefore can be realized by cooperation within a strategic alliance. A strategic alliance is able to develop and support a competitive shopping formula by which the individual retailer can compete with the integrated chain store organizations.

Cooperation of small and medium sized enterprises in the retail branch may be a good strategic alternative for the realization of a strong, competitive market position (Schreuder, 1989).

2.1. Problem formulation

Whether such a strong competitive position is achieved by different strategic alliances of small and medium sized enterprises, in casu the retailers and the retail cooperations within the cooperation channel is the main focus of our study. Especially the degree of cooperation in relation to the performance of the cooperating firms. To investigate this problem we conducted a market survey in the dutch mens wear market. All strategic alliances were investigated.

2.2. Set up of the study

The research was conducted in two phases: In the first phase all managing directors of the strategic alliances in the coordination channel were interviewed in order to investigate the existence of the three models of management structure in the mens wear business.
In the second phase a sample of N = 227 retailers from the different networks were interviewed on organizational characteristics and performances.

The information from phase one, the managers view, will be compared with the retailers view form phase two. Finally the influence of the network management structure on the retailers performance both in task functioning and in financial measures: profit and turnover, will be discussed.

2.3. Strategic Alliances: identification

In the first part of the study the managing (marketing) directors of all the (11) strategic alliances in the coordination channel of mens wear were interviewed. These interviews covered four cooperation characteristics: the intensity, the level and the focus of cooperation and the realization thereof (see figure 3). Special attention was given to the distribution functions, the retail mix and the shop formula. On the basis of these interviews and the information of the statutes and other official documents, the different strategic alliances were classified as one of the three management structures. In total there are eleven strategic alliances in the coordination channel. Four of these strategic alliances had to be classified as integrated network and therefore could not be classified as one of the three network models. In interviewing members of these networks it became clear that the cooperation within the network was not based on voluntarity, in fact cooperation was out of the question. The network leader was dominating the network. In many cases he was the proprietor of most of the retail outlets.
The classification of the other strategic alliances according to the network models is as follows:

- two of them can be characterized as a supremacy network. The marketing strategy of these alliances is based on a shop formula. All the participating retailers are using this formula. The alliance is supporting the retailers on all facets of the shop formula. The cooperation within the two alliances is executed on an organizational

level, and can be classified as intensive, focused on the reinforcement of the market position of the alliance, by means of a collective, integrated marketing strategy;
- two alliances can be characterized as a coordination network. Their strategy is focussed on the reinforcement of the market position of the individual retailer as well as on de market position of the alliance as a whole. They offer their members a wide variety of services concerning almost all the entrepreneurial tasks. They even develop retail and shop formula's for there members. These formula's can be used on the basis of voluntarity. The cooperation within these two alliances is executed on an organizational and functional level. It can be classified as intensive, focused on the market positioning of the individual retailer and the alliance, by means of a semi-integrated marketing strategy;
- two alliances can be characterized as a cooperation network. These two strategic alliances focus on the reinforcement of the market position of the individual retailer. They offer services mainly on the buying function as well as limited services on the commercial functions of their members. The cooperation within the two alliances is executed on a functional level. It can be classified as extensive, focussed on the market position of the individual retailer, by means of a marketing function oriented marketing strategy.

Finally there was one strategic alliance that could not be classified because of the recent date of its establishment.

2.4. Strategic Alliances: sampling

Classifying the strategic alliances into three categories on the basis of factual information and management interviews gave us the strata for the sampling of the retailers. Retailers from each of the three types of strategic alliances were randomly drawn. In table 3 the composition of the retailers sample is given.

The retailers from the different networks were interviewed. The interviews focussed on the organizational performances and organizational characteristics. This creates a possibility for a comparison between the different network models on the degree of cooperation; performance measures; and organizational characteristics.

Table 3: Composition of the retailers sample

network-management-structure	sample	population
- supremacy model	72	243
- coordination model	109	344
- cooperation model	46	142
Total	227	729

The sample is representative for the population in the retail sector of mens wear: there is no significant difference between the composition of the sample and the population.

3.1. Results

Our first interest concerns the degree of cooperation within the three different types of strategic alliances in the mens wear business. A comparison will be made between the retail members of the Cooperation model, the Coordination model and the Supremacy model. This analysis makes it possible to compare our findings from the interviews of the managing (marketing) directors of the strategic alliances with the results from the retail member interviews;
Secondly we will make a comparison between the different types of strategic alliances on the basis of the performances of the member retailers;
Thirdly we will analyse the retailers from the three types of strategic alliances on their organizational characteristics. This provides an insight in the organizational background of the members of the different types of strategic alliances;
Finally we will investigate the combined influence of the type of networks, type of retail outlet and entrepreneurial behavior on retail performance.

3.2. The degree of cooperation

The degree of cooperation within a strategic alliance can be measured by the services offered by the strategic alliance. Measuring the intensity by which the retailers make use of the offered services gives an impression of the degree of cooperation within the strategic alliance.

In general the strategic alliances offer the following service package:

-1- *central payment to suppliers;*

-2- *order bundling/central buying*, the strategic alliances offer services for bundling the individual orders of their members, and are able to take care of the buying process (negotiation, delivery terms, terms of payments) of their members;

-3- *composition of assortment and selection of articles*, the strategic alliances advise their members on the composition of their assortment, or even compose the assortment for their members;

-4- *stock keeping and warehouse facilities*, the strategic alliances offer their members stock keeping and warehousing facilities;

-5- *presentation and interior shop decoration (house style)*, the strategic alliances advise or formulate directives for their members on interior decoration, house style etcetera. They even offer production facilities for interior decoration;

-6- *collective advertising*, the strategic alliances offer their members facilities on advertising. They design collective advertising campaigns, direct mailings, door-to-door leaflets, brochures etcetera;

-7- *brand names for private label operations*, the strategic alliances design private label operations for their members. This is done in close harmony with a number of confectioners. The distribution of the private labels is exclusively restricted to the members of the strategic alliances.

-8- *advises on business economics;*

-9- *assistance and advice on automation*;

-10- *legal advise*;

The decision whether to make use of the offered services entirely depends on the relation between the strategic alliance and the retailers. In most cases usage is on a voluntary basis, but in some cases the members of the strategic alliance are forced to make use of the facilities offered. This is for example the case with some private label operations.

The more the members of the strategic alliance make use of the available services the closer the relationship between the strategic alliance and their members, and the higher the degree of cooperation. An overview of the results concerning the degree of cooperation is given in table 4. The first column in table 4 gives an indication of the overall degree of cooperation. The following columns are showing the degree of cooperation within the Cooperation model, the Coordination model and the Supremacy model. The differences between the three groups are analyzed by ANOVA.

Table 4: The degree of cooperation: usage of the services offered by the strategic alliance (n=227)

service offered	total average use (in %)	intensity of use (in %) by strategic alliance			signif
		Coop N=46	Coord N=109	Supremacy N=72	
1- central payment	88,1	93,5	89,0	83,3	no
-2- order bundling/central buying	53,7	52,2	54,1	54,2	no
-3- assortment/selection of articles	64,8	76,1	65,1	56,9	*
-4- stock keeping/warehousing	41,4	28,3	57,8	25,0	**
-5- presentation/interior decoration	30,8	19,6	30,3	38,9	*
-6- collective advertising	59,0	78,3	54,1	54,2	**
-7- use of private labels	27,3	43,5	24,8	20,8	**
-8- advise on business economics	53,3	47,8	49,5	62,5	no
-9- advise on automation	37,9	65,2	48	31,7	**
-10- legal advise	26,4	34,8	25,7	22,2	no
average use of the services	48,3	53,9	49,8	45,0	**

legend: ** á-value <.05; * á-value <.10

The results stated in table 4 indicate that the strategic alliances that can be characterized by the Cooperation model actually have the highest degree of cooperation, whereas the

Supremacy model has the lowest degree. This is astonishing as the results from the interviews of the managing directors of the strategic alliances suggested quite the opposite. An explanation of the difference can be found in the differences in focus of the strategic alliances. The Cooperation model focusses on the reinforcement of the market position of the individual retailer. The service package they offer is based on this focus. The retailers within the Cooperative model hold the same opinion about the focus of their strategic alliance. There is no divergence on the strategic market orientation between the managing directors of the Cooperation model and their members. In the case of the Supremacy model there is a certain divergence between the managing directors and the retail members. They both have a different opinion about the strategic goals of the alliance. The managing directors are concerned about the market position of the strategic alliance as a whole, and think that the individual market position of their members is of a minor importance. They think that a good market position of the alliance implicates a good market position for the retail members. The Supremacy model is focussing on a collective marketing strategy. The problem within the Supremacy model is that a large part of the retailers do not agree with this strategy. The divergent opinions about the strategic orientation of the strategic alliance causes problems of cooperation. The managing directors of the alliance could try to force the retail members to cooperate. This however may lead to an exodus of retailers who probably will join another (competing) strategic alliance.
An illustration of the difference in cooperation between the two most opposite models of strategic alliances can be found in the collective advertising: within the Supremacy model every member will have the same campaign, while in the Cooperation model every member will have the same brochure. It may be easier to join a cooperate activity when being a member of a strategic alliance of the Cooperative model.

In order to get some more insight in the degree of cooperation a factor analysis is conducted on the service package of the strategic alliances. Factor analysis gives the opportunity to determine the basic elements for cooperation. An overview of the results from the factor analysis on the service package is given in table 5.

Table 5: Factor analysis on the service usage of the strategic alliances (loadings on PCA-varimax rotated factors)

variables	factor 1	factor 2	factor 3	factor 4
- assortment/selection of articles	0,82			
- central payment	0,70			
- collective advertising	0,69			
- order bundling/central buying	0,65			(0,58)
- advise on automation		0,76		
- advise on business economics		0,66		
- legal advise		0,57	(0,55)	
- use of private label			0,73	
- stock keeping/warehousing	(0,51)		0,69	

- presentation/interior decoration	0,88
R^2 total 69,4%	

The four factor solution explains 69,4% of the total variance. Factor 1 can be interpreted as the traditional collective buying and selling function of the cooperation: all four high loading variables express this traditional function. Originally the strategic alliances in the mens wear business were founded in order to give the retailers support on the buying function. Soon their after the strategic alliances started to develop collective advertising campaigns for their members. Factor 2 represents the advice function of the strategic alliances. Factor 3 expresses the usage of private labels. Shop presentation and interior decoration form the last factor (4). The four factors represent the basic entrepreneurial support functions of the strategic alliances in relation to their members. By computing the factor scores of the three types of strategic alliances it is possible to compare them. The results of this analysis are presented in table 6.

Table 6: Average entrepreneurial factor scores for the three types of strategic alliances

entrepreneurial factors	types of strategic alliances			
	Cooperation	Coordination	Supremacy	F-value (2,224 df)
Traditional buying/selling function	0,18	0,06	-0,20	2,42 *
Advice function	0,47	-0,30	0,16	12,45 **
Private label	0,01	0,21	-0,32	6,27 **
Interior decoration	-0,40	-0,02	0,28	6,78 **

legend: ** á-value <.05; * á-value <.10

The results from table 6 indicate that the Cooperation model can be characterized by a higher than average cooperation on the traditional buying and selling function and the advice function. A lower than average cooperation is found on the shop presentation and interior decoration function.
The cooperation within the Coordination model can be characterized by a lower than average cooperation on the advice function and higher than average on the private label support. The cooperation within the Supremacy model can be characterized by a higher than average cooperation on the interior decoration and advice function, but a lower than average cooperation on the traditional buying and selling functions and private label support.
The profile of the retailers within the Cooperation model is in harmony with the results from the interviews with the managing directors of the strategic alliances. The same conclusion goes for the Coordination model. But within the Supremacy model one would aspect a higher score on the private label operations, as well as on the traditional buying function. It may well be that the character of a free entrepreneur and a network that tries to prescribe these entrepreneurs a shop-formula leads to conflicting ideas and a reluctance to cooperate on all aspects.

3.3. Differences in performance

The performance of a strategic alliance can be expressed by means of a number of qualitative and quantitative measures. Both types of measurements will be discussed in this section. At first qualitative aspects and then the quantitative performance differences will be discussed.

Qualitative performance indicators
The qualitative measures give an indication of the level of professionalism within the strategic alliance. The qualitative performance includes:
- the degree of automation;
- the availability of in- and external information;
- the service level.

Table 7 gives an overview of the results of the three types of strategic alliances on these qualitative performance measures. ANOVA is used to analyze the differences between the three types of strategic alliances.

Table 7: differences in performance indicators of the three different types of strategic alliances: qualitative indicators (n = 227)

performance indicators	Strategic Alliance			sign F-test
	Cooperation	Coordination	Supremacy	
- degree of automation	64%	40%	51%	**
- availability of internal and external information	20% has a lot of information available, 80% little	19% has a lot of information available, 81% little	38% has a lot of information availa-ble, 62% little	*
- the service level	66% has a high service performance, 34% a low performance	51% has a high service performance, 49% a low performance	62% has a high service performance, 38% a low performance	no

legend: ** á-value <.05; * á-value <.10

From table 7 we may conclude that the retailers in the Cooperation model are performing better as far as the degree of automation is concerned. An explanation for this is the high degree of cooperation on this aspect within the Cooperation model (see table 4). The retailers from the Supremacy model have more internal and external information available, that can be explained by the high level of information gathering and information distribution within the Supremacy model.

Quantitative performances measures

The quantitative performance measures can be divided into two categories, namely the measures that give an impression of the (average) productivity of the strategic alliance and the measures that give an impression of the (average) profitability. In order to obtain this information the complete financial administration, the yearbooks, the profit and loss state etc., as controlled by the accountant, was used to derive the necessary performance measures. An overview of the performances of the retailers from the three different types of strategic alliances is given in table 8. The differences are again tested by using analysis of variance (ANOVA).

Table 8: Differences in performance of the three types of strategic alliances: productivity and profitability (n =227)

performance measure	Type of strategic alliance			sign F.
	Cooperation	Coordination	Supremacy	
Productivity				
- turnover per full-time equivalent	ƒ 303.146	ƒ 272.213	ƒ 271.819	**
- turnover per labour hour	ƒ 187	ƒ 127	ƒ 133	**
- turnover per m^2 selling space	ƒ 6.923	ƒ 5.837	ƒ 5.439	**
- turnover per m^2 shop space	ƒ 5.030	ƒ 4.181	ƒ 4.050	**
- speed of turnover	3,3	3,5	3	no
- average turnover per outlet	ƒ 1.612.491	ƒ 931.674	ƒ 913.989	**
Profitability				
- gross profit	ƒ 686.334	ƒ 374.786	ƒ 367.485	**
- gross profit margin	41,5%	39,8%	39,7%	**
- gross profit per m^2 selling space	ƒ 2.866	ƒ 2.321	ƒ 2.172	**
- gross profit per full-time equivalent	ƒ 121.260	ƒ 107.329	ƒ 108.314	**
- gross profit per labour hour	ƒ 76	ƒ 51	ƒ 54	**

legend: ƒ = Dutch guilder ** : p of F-value <.05

The results from table 8 indicate that the average productivity and the average profitability, as expressed in different measures, of the retailers within the Cooperation model is significantly higher: they have a significantly higher labour productivity, selling space productivity, labour profitability and selling space profitability. This indicates a more efficient way of running the enterprise. The significantly higher turnover, gross profit and gross profit margin of the retailers within the Cooperation model indicates a better performance on the buying and selling activities.
The other two strategic alliances do not differ very much from one another.

The first impression is that the strategic alliances that can be characterized by the Cooperation

model have a higher degree of cooperation, and do a much better job than the other two types of strategic alliances.
In order to get some more insight in the reasons why the strategic alliances with the highest performance are characterized by a higher degree of cooperation, we will first compare the members of the different types of strategic alliances on their organizational characteristics.

3.4. Organizational characteristics of the strategic alliances

Information on organizational characteristics from each of the retailers was collected. It includes labour force characteristics, investment variables and commercial information.
An overview of these different organizational characteristics is given in table 9.

Table 9: Organizational characteristics: a comparison between types of strategic alliances

organizational characteristics	types of strategic alliances			
	Cooperation	Coordination	Supremacy	sign
labour force variables				
-number of owners/directors	1,4	1,3	1,3	no
- number of full-timers	4,4	2,3	1,9	*
- total number of labour hours per week	183,2	145,6	129,7	**
- total number of labour hours per staff member per week	19,3	17,3	17,5	*
investment variables				
- average investments in the retail outlet	ƒ 381.200	ƒ 64.750	ƒ 20.500	**
- average investment in automation	ƒ 5.262	ƒ 7.782	ƒ 6.302	no
- number of retailers that invested in the store outlet	10,8%	22,0%	16,7%	no
- number of retailers that invested in automation	19,6%	19,3%	20,8%	no
commercial variables				
- average advertising budget	ƒ 30.500	ƒ 24.582	ƒ 21.446	no
- number of regular clients	2.485	1.800	1.269	*
- average m² selling space	271 m²	200 m²	202 m²	no
- top-3 brand share	34,7%	38,8%	37,5%	no
- price level small confectionery	ƒ 260	ƒ 160	ƒ 159	**
- price level large confectionery	ƒ 560	ƒ 411	ƒ 402	**
- average age of the enterprise	40	44	40	no

There are organizational differences between the three different types of strategic alliances.

Especially the retailers from the cooperation model can be characterized as large in comparison with the retailers from the two other groups. They have a higher input of labour, higher investments, a larger customer base and a larger shop. The question arises to what degree the differences in performances, as found in table 8, are a function of the differences in organizational characteristics and entrepreneurial behavior or caused by differences in type of strategic alliance.

3.5. Strategic alliances performance differences

In order to estimate the influence of retail characteristics, entrepreneurial cooperative behavior and type of strategic alliance on the performance of the 227 retailers, regression analyses are used. The results of the regression analysis are presented in table 10.

Table 10: Regression results on profit and turnover with retail characteristics, marketing factors, cooperative behavior and type of strategic alliance as predictors.

Independent Variables	**Gross Profit**				**Gross Turnover**			
	Coop	**Coord**	**Supr**	**Total**	**Coop**	**Coord**	**Supr**	**Total**
Total labour hours	.16**	.78***	.34***	.20**	.20**	.79***	.32***	.25***
Price level small confectionery	-.03	-.08	.07	-.05	-.05	-.04	.02	-.04
Price level large confectionery	.09	.14**	.05	.08	.12	.10*	.06	.08
Advertising budget	.33***	.00	.08	.23***	.37***	.01	.10	.23***
Store size	.70***	.16**	.66***	.57***	.64***	.17**	.70***	.56***
'Top 3 brand'- share	.10	-.06	-.03	-.00	.09	-.04	-.02	.01
Total average investment	-.12	.01	.03	-.03	-.07	.00	.01	-.01
Collective buying	-.02	-.03	.01	-.00	.00	-.05	.04	-.01
Advice	.00	.07	-.08	.05	.03	.05	-.10	.05
Private label	-.09	.10**	.10	.01	-.06	.06	.15**	.02
Interior decoration	.03	-.02	-.03	-.01	.07	-.04	-.02	-.01
D1=Coop				.12**				.10**
D2=Coord				-.03				-.03
R^2	.86	.85	.75	.67	.83	.87	.76	.70
N	46	109	72	227	46	109	72	227

* Standardized â weight p-value < 0.10
** Standardized â weight p-value < 0.05
*** Standardized â weight p-value < 0.01

In table 10 the results of 8 regression analyses are given. For each of the three types of strategic alliances separately a regression analysis of retail characteristics on gross profit and on gross turnover is performed. Also the results from regression analyses for all retailers together on profit and turnover is given. The first column of table 10 gives the independent variables, the predictors, for the regression analyses. They include: size of labour force, price level for the two main components of the mens wear assortment: small and large confectionery, the advertising budget, store size, the total year investment as well as the assortment type as expressed in the 'top 3 brand'-share. This share expresses the degree in which the assortment is focussed on just a few brands or has a more diverse composition. These retail characteristics include the production factors: store, labour and investments as well as the marketing mix elements: price, advertising and assortment. Two dummy variables D_1 and D_2 are included in the overall analyses: $D_1 = 1$ for the cooperative retailers, $D_2 = 1$ for the coordination retailers and both D_1 and D_2 are zero for the supremacy retailers. (Including $D_3 = 1$ for supremacy would lead to an overdetermined correlation matrix).
The four behavioral cooperation factors are also included.
Each of the other columns presents the standardized â-weights of the independent variables in explaining gross profit and gross turnover. The results show that between 75 and 87 % of the variance in profit and turnover can be explained by the predictor variables. Not included factors such as location of the store, the person of the owner, earlier investments etc. could have added to the explained variance. Size of the store and labour input explain most of the variance in both profit and turnover. For the retailers from a coordination network labour input explains more than store size the performance. For the other retailers store size is the most important production factor. Price level has only for large confectionery a small, not really significant, positive effect on profit and turnover. Assortment differences show no effect. Advertising has an overall positive effect on profit and turnover mainly due to the cooperation retailers. May be that their somewhat higher advertising expenditures exceed a minimal level above which its effect becomes visible. Investments do not immediately pay off: only a slight negative effect on profit for the higher investing cooperation retailers (-.12) is found. The difference, both in profit and turnover, between the cooperation retailer and the others, D_1, is significant. So, apart from all the other production factors and marketing mix variables, being a member of a cooperative strategic alliance effects both turnover and profit positively.
A higher price level for large confectionery is profitable for retailers from a coordination type strategic alliance. Using a private label shows a significant positive effect on the turnover of the supremacy type retailers and a significant better profit for coordination type retailers. Making use of private labels leads to an increase in performance for retailers within a strategic alliance from a coordination or supremacy type. For retailers from a cooperation strategic alliance type private labels do not add to a better financial performance.

4. Discussion

In this contribution the results are presented of an empirical study amongst retailers, members of different types of strategic alliances in mens wear in the Netherlands. It is found that the actual cooperation in strategic alliances is different from the official stated and intended cooperation. The information of network leaders is in contrast with actual behavior of the members. Leaders from a Supremacy type and of a Coordination type of strategic alliance expect their members to use more services from the strategic alliance when compared with retailers associated with a Cooperation type of strategic alliance. It was suggested that too much cooperative pressure lead to a lesser usage of cooperative services.

The three type of strategic alliance show differences in profit and turnover: the retailers from a Cooperative type of strategic alliance have a higher profit and turnover than the others. A somewhat larger shop and a different shop formula employed by the Cooperative strategic alliances affects profits positively. Private labels seem to have a positive effect on profit and turnover for the Coordination and Supremacy type of retailer. May be the higher price margin is responsible for that success. Although the private labels within the Cooperation networks are not really successful in producing profits, the voluntary high level of actual cooperation together with a good shop formula affects channel performance. Cooperation in the distribution channel, if voluntary, seems to be profitable.

References

Arndt, J. (1979), "Toward a concept of domesticated markets", ~~Journal of Marketing~~, Vol. 43, p. 70.

Boekema, F.W.M. and D.J.F. Kamann (1989), ~~Sociaal Economische Netwerken~~, Groningen.

Duijnhouwer A. (ed) (1992), ~~Competitiveness, Autonomy & Business Relations, An International Comparative Study~~, EIM, Zoetermeer.

Gianotten, H.J., F. Pleijster and A.B. Zwaard (1988), ~~Commerciële Samenwerking in de Detailhandel, Meningen, Ervaringen en hoe nu verder~~, Economisch Instituut voor het Midden- en Kleinbedrijf, Zoetermeer.

Håkansson, H. (1987), ~~Industrial Technology Development: A Network Approach~~, London, Croom Helm.

Harrigan, K.R. (1983), ~~Strategies for Vertical Integration~~, Lexington Books, Massachusetts, Toronto.

Hartog, G.J. den and H.R. Commandeur (1990), ~~Strategische Samenwerking: Onvermijdbaar Gereedschap~~, rapport 9009/M, Center for Research in Business Economics, juni 1990.

~~Jaarboek Detailhandel 1993/1994~~ (1993), Hoofdbedrijfsschap Detailhandel, Zoetermeer.

Klugt C.J. van de (1989), "Practische aspecten van strategische samenwerking", ~~ESB~~ 29-11-1989.

Kotler, Ph. (1991), ~~Marketing Management, Analysis, Planning, Implementation and Control~~, 6th. edition, Prentice Hall, Englewood Cliffs NJ.

Melin, L. (1987), "The field-of-force metaphor: a study in industrial change" ~~International Studies of Management and Organization~~, XVII:1, pp. 24-33.

Meulenberg, M.T.G. (1989), "Struktuur en ontwikkeling van afzetkanalen: een literatuuroverzicht", ~~Jaarboek Nederlandse Vereniging van Marktonderzoekers~~, p1. 247-263.

Porter, M.E. and M.B. Fuller (1986), "Coalitions and Global Strategy", in: ~~Competition in Global Industries~~, Boston/Massachusetts, Harvard Business School Press, p. 315-343.

Schreuder, H. (1989), "Strategische Samenwerking", ~~Economisch Statistische Berichten~~, 29 november 1989, 74e jaargang, nr. 3735 blz. 1175.

Scott, J. (1985), "Theoretical Framework and Research Design", in: Stokman F. & Ziegler R. & Scott J. (eds), ~~Networks of Corporate Power. A Comparative Analysis of Ten Countries~~, pp. 1-19 Cambridge.

Stern, L.W., A.I. El-Ansary and J. Brown (1989), ~~Management in Marketing Channels~~, first edition, Prentice Hall, Englewood Cliffs, New Jersey.

Stern, L.W. and A.I. El-Ansary (1991), ~~Marketing Channels~~, fourth edition, Prentice Hall, Englewood Cliffs, New Jersey.

Szarka, J. (1989), "Networking in Small Firms", ~~International Small Business Journal~~, volume 8/2, p. 10-22.

Varadarajan P.R. and D. Rajaratnam, "Symbotic Marketing Revisited", ~~Journal of Marketing~~, Vol. 50, (january 1986), p. 7-17.

Verhallen Th.M.M. (1994), ~~Toetsenboek~~ (in press), Stenfert Kroese, Leiden.

Yanagida I. (1992), "The Business Network: a Powerful and challenging Business Tool", ~~Journal of Business Venturing~~, 7, p. 341-346.